

P
Med.
P

Dr. M. H. S.

PEDIATRICS

19

OWNER
DILLON BROWN, M.D.
NEW YORK

EDITOR
GEORGE CARPENTER, M.D.
LONDON

MAR 16 1949

UNIVERSITY OF TORONTO

DEVOTED TO THE
DISEASES OF CHILDREN

PUBLISHED SEMI-MONTHLY
WITH ILLUSTRATIONS

HARRISON & SONS, 45, ST. MARTIN'S LANE, LONDON, W.C.

Van Publishing Company, 1432, Broadway, New York.
J. C. Juta & Co., Cape Town, Cape of Good Hope.
Eyre & Spottiswoode, Sydney, Australia.

Published on the 1st and 15th of the Month, 8 Shillings a Year.

PEDIATRICS

An Illustrated Semi-Monthly Devoted to the
Diseases of Infants and Children.

OWNER:
DILLON BROWN, M. D.
NEW YORK.

EDITOR:
GEORGE CARPENTER, M. D.
LONDON.



EDITORIAL STAFF:

MEDICINE.

- Angel Money, M. D., Sydney, Australia, Formerly Assistant Physician to the University College Hospital, and to the Great Ormond Street Hospital for Sick Children, London.
A. Jacobi, M. D., New York, Clinical Professor of Diseases of Children in Columbia College.
J. Lewis Smith, M. D., New York, Emeritus Professor of Diseases of Children in Bellevue Hospital Medical College; Visiting Physician to the Foundling Hospital and the Infant Asylum, etc.
Frederick Foreheimer, M. D., Cincinnati, Ex-President of the American Pediatric Society, and Professor of Diseases of Children in the Medical College of Ohio.
Daniel Colquhoun, M. D., Dunedin, New Zealand, Examiner in Medicine at the University.

SURGERY.

- Henry R. Wharton, M. D., Philadelphia, Surgeon to the Children's and the Presbyterian Hospitals.
Frederic S. Eve, F. R. C. S., Eng., London, Surgeon to the London Hospital and to the Evelina Hospital for Children.
Lambert H. Ormsby, M. D., F. R. C. S. L., Dublin, Surgeon Meath Hospital and National Children's Hospital.
C. P. B. Chubb, M. R. C. S., Sydney, Australia, Senior Surgeon to the Hospital for Sick Children.
D. Leith Napier, M. D., Adelaide, New South Wales, Senior Surgeon and Gynaecologist to the Adelaide General Hospital.
Albert Martin, M. D., Wellington, New Zealand, Surgeon to the Wellington General Hospital.

ORTHOPEDICS.

- Henry Ling Taylor, M. D., New York, Assistant to the Hospital for Ruptured and Crippled.
Frederic R. Fisher, F. R. C. S., Eng., London, Senior Surgeon to the National Orthopedic Hospital, and late Surgeon to the Victoria Hospital for Children.

THERAPEUTICS.

- Prof. Adolf Buginsky, Berlin, Director of the Kaiser and Kaiserin Friedrich Wilhelm Children's Hospital.
Reynold W. Wilcox, M. D., New York, Professor of Therapeutics in the Post-Graduate Medical School and Physician to St. Mark's Hospital.
John Thomson, M. D., Edinburgh, Extra Physician Royal Hospital for Sick Children, and Lecturer on Diseases of Children, Edinburgh School of Medicine.
Dawson Williams, M. D., London, Physician to the East London Hospital for Children.

TERATOLOGY.

- Egbert H. Grandin, M. D., New York, Ex-President of the County Medical Society; Consulting Obstetric Surgeon to the Maternity Hospital, and Gynecologist to the French Hospital.
J. W. Ballantyne, M. D., Edinburgh, Lecturer on the Diseases of Infancy and Childhood, Minto House; and Physician for Diseases of Children, Cougate Dispensary.

GASTRO-ENTERIC DISEASES.

- Morris Manges, M. D., New York, Physician to Mount Sinai Hospital and Editor of "Kwata's Diseases of the Stomach."
J. Boas, M. D., Berlin, Editor of the "Archiv für Verdauungs Krankheiten."

TROPICAL DISEASES.

- Surgeon Lieutenant-Colonel L. M. S., Charles H. Joubert, M. B. F. R. C. S., Calcutta, India, Professor of Midwifery and Obstetric Physician, Medical College of Calcutta.
Surgeon-Major H. P. Birch, Quetta, India.

GENTO-URINARY DISEASES.

- Frederic Russell Sturgis, M. D., New York, Visiting Surgeon to the City Hospital.
G. A. Wright, M. B. Oxon., F. R. C. S., Manchester, Senior Assistant Surgeon to the Manchester Royal Infirmary, and Surgeon to the Hospital for Children, Pendlebury.
Fauconet Barnes, M. D., London, Consulting Physician to the British Lying-in Hospital.

NEUROLOGY.

- Joseph Collins, M. D., New York, Physician to the Hospital for Nervous Diseases.
James Taylor, M. D., London, Senior Assistant Physician to the National Hospital for the Paralyzed, and Physician to the North Eastern Hospital for Children.

MATERIA MEDICA.

- Henry H. Rusby, M. D., New York, Professor of Materia Medica and Botany in the College of Pharmacy.

LARYNGOLOGY AND OTOTOLOGY.

- Wm. C. Glasgow, M. D., St. Louis, Professor of Laryngology in the Missouri Medical College.
Arthur H. Chentle, F. R. C. S., London, Surgeon to the Royal Ear Hospital and Clinical Assistant to Aural Department of King's College Hospital.
Max Thorne, M. D., Cincinnati, Professor of Laryngology and Otology, Cincinnati College of Medicine and Surgery; and Aural and Laryngologist to the Cincinnati Hospital.
Peter McBride, M. D., Edinburgh, Aural Surgeon and Laryngologist, Royal Infirmary; and Lecturer on the Diseases of the Ear and Throat, Edinburgh School of Medicine.

DERMATOLOGY.

- James Nevins Hyde, M. D., Chicago, Professor of Skin and Venereal Diseases in Rush Medical College.
Leslie Phillips, M. D., Birmingham, England, Surgeon Birmingham and Midland Skin and Lock Hospital.

OPHTHALMOLOGY.

- Myles Standish, M. D., Boston, Ophthalmic Surgeon to Carney Hospital and to Massachusetts Charity Eye and Ear Infirmary.
William Arthur Brailley, M. D., London, Ophthalmic Surgeon to Evelina Hospital for Children and Guy's Hospital.

PATHOLOGY AND BACTERIOLOGY.

- Henry Ashby, M. D., Manchester, Physician Manchester General Hospital for Children; and Lecturer on Diseases of Children, Owens College.
Alfred Lingard, M. D., India, Muktesar, Kumaon Hills, N. W. P., Imperial Bacteriologist.

PHYSIOLOGY.

- C. S. Sherrington, M. D., F. R. S., Liverpool, England, Holt Professor of Physiology, University College.

PSYCHOLOGY.

- T. Telford Smith, M. D., Lancaster, England, Resident Medical Superintendent, Royal Albert Asylum.
Lightner Witmer, Ph. D., Philadelphia, Professor of Psychology in the University of Pennsylvania.

PEDIATRICS

Vol. II.

NOVEMBER 1st, 1896.

No. 9.

Original Articles.

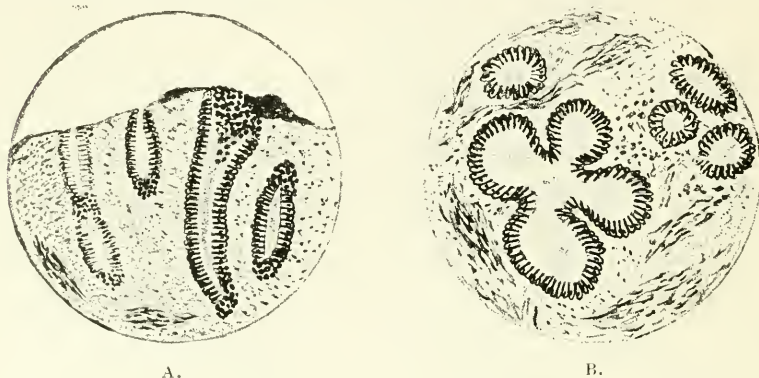
THE UMBILICAL GROWTH OF INFANTS AND YOUNG CHILDREN.

By CHARLES A. MORTON, F.R.C.S., Eng.
Bristol,

Surgeon to the Bristol General Hospital, and to the Hospital for Sick Children and Women.

AN infant, E.N., aged seven months, came under my care as out-patient at the Bristol General Hospital, in April, 1893, with a small umbilical growth, of about the size of a pea. It was of a bright red color, sessile, and the summit was covered with what looked like skin. It had been present ever since the separation of the cord. The infant had been brought to the hospital twice every week for three months as a casual patient, and solid nitrate of silver had been applied, and ointment and strapping used. No orifice could be seen on the surface of the growth, and there had been no faecal or urinary discharge, but some watery oozing occurred from its surface. I ligatured the base and snipped it off. The point of section healed readily. Microscopic sections show a center of involuntary muscle fibers and a periphery of glands like Lieberkuhn's in the intestine. The surface epithelium, if there ever was any, had disappeared. The glands opened on the surface. My second case was that of a child a few years old, who was sent to me at the General Hospital, last December, by Mr. Lydell, under whose care she had lately come. In the umbilical depression was a very red, smooth, round, slightly pedunculated growth, about the size of a pea. It could only be seen with considerable difficulty, as it was so humid in the depression.

There was constant "weeping" from it, but no discharge of urine or fæces. It had been cauterized and had had caustic applied to it at another hospital. After dilating the umbilical opening with forceps, I was able to get a catgut ligature around the base (which I found on one side was covered with skin, but the other outer with red mucous membrane) and singe it off. It had not grown from the center of the umbilical depression, but more from the right side. The point of section quickly healed. Microscopic examination of the growth shows that it has essentially the same structure as the first case—that it is composed of glands of the type of Lieberkuhn's glands and of unstriped muscle fibre—but the glands in this tumor penetrate quite into the center, and are not present in the periphery alone, as in the first case. In some parts of



the section, columnar epithelium can be seen on the surface of the growth. The gland tissue in the center of the section and in portions of the periphery reminds one very much of an ordinary innocent adenoma of the intestine, such as the glandular polypus. There is an abundance of muscle fibre scattered about gland tissue. Fig. A represents the periphery of the section (which was made right across the growth), and shows gland tubes like Lieberkuhn's for the opening on the surface, and some bundles of muscle fibre. Fig. B is from the center of the growth, and shows the arrangement of gland tissue and bundles of muscle fibre present in that part.

The growth then resembles small intestine in structure, and, as has been pointed out by Bland Sutton and others,

probably arises in connection with the vittelo-intestinal duct. It is certainly an adenoma, but it is more than an adenoma for it contains an abundance of unstriped muscle fibre. It is like most of the growths arising in foetal remains, complex in nature. By some it has been called a mucous polypus, and by others "a granulation polypus from irritation," but such names are clearly incorrect. The best description of the growth which I can find is in Bland Sutton's book on Tumors¹. Colman showed a specimen of it at the Pathological Society in 1882.² He called it "adenomatous polypus of the umbilicus." It was the size of a split pea and distinctly pedunculated, and had been removed from a child aged two months, but was first noticed when the infant was fourteen days old. It was composed of a core of ordinary unstriped muscle and covered by a thick layer of mucous membrane which contained Lieberkuhn's follicles and adenoid tissue. Morris³, of New York, points out that intractable eczema around the umbilicus in young children may be due to the irritating secretion from some glands, which exist in a little patch of mucous membrane within the umbilical depression, which he recommends should be seized by a tenaculum and removed. A picture of a section of such a patch, which he gives, might have been drawn from the section of my first case, so closely does it resemble it. He attributes the origin of these little patches of mucous membrane to the vitteline duct.

Polypoid growths at the umbilicus are sometimes associated with an opening from which fæces or urine discharge, and from failure of the vittelo-intestinal duct or the urachus to close. A cyst also is occasionally found at the umbilicus, lined with a thin skin exactly resembling small intestine. It is developed from the vitteline duct⁴.

¹ Page 389.

² Trans. Path. S., Vol. xxxix, p. 110.

³ Lectures on appendicitis and notes on other subjects, 1895, p. 92.

⁴ Bland Sutton "Tumors," page 389.



ON A VARIETY OF PURPURA HÆMORRHAGICA.
(Henoch's Purpura.)

By G. A. SUTHERLAND, M.D., Edin.,
London.

AMONGST the many varieties of the hæmorrhagic diathesis in children, none presents greater difficulties than that known as Purpura Hæmorrhagica, or Morbus Maculosus Werlhoffii. Certain of the cases are secondary to some acute specific fever or other infective disorder; but a large number remains, which must be considered at present as primary or idiopathic, in the absence of any knowledge of their ætiology or pathology. Until this knowledge is forthcoming we must be content to classify them according to their clinical signs and symptoms. Proceeding on these lines Henoch¹, in 1874, recorded a series of cases characterized by purpura with colic, vomiting, intestinal hæmorrhage, rheumatoid pains, and, less constantly, swelling of the joints. In 1876 Couty² published some more cases, the leading symptoms of which were purpuric outbreaks, gastro-intestinal troubles, and cutaneous œdema. He regarded the affection as nervous in origin, and dependent on an irritative lesion of the sympathetic system, comparable to some extent to that seen in lead poisoning. In 1890 Dusch and Hoche³ made a careful study of all the recorded cases and came to the conclusion that the form of purpura described by Henoch is to be regarded as a well defined and distinct affection. In Germany and in America this disease is now known by the name of "Henoch's Purpura," but in England it does not seem to have attracted much attention. Two very typical cases were recorded by Bristowe⁴ in 1885, under the title "Purpura Urticans," as they appeared to him to resemble the affection described by Willan under that name. The patients were boys, aged respectively ten and fifteen years, who suffered from abdominal pain, melæna hæmaturia, and a purpuric eruption on the extremities.

The following cases are recorded for the purpose of adding evidence in support of the view that Henoch's Purpura is a distinct clinical entity, and also of supplying some further clinical observations. The patients were admitted into Paddington Green Children's Hospital, under the care of Dr. Les-

lie Ogilvie, to whom I am indebted for permission to publish the cases. My best thanks are also due to the house surgeons, Dr. John McGregor, Mr. G. H. Lock, and Dr. Lewis Moysey, for the careful clinical records.

Case 1.—A male child, aged three years and nine months. Abdominal pain, vomiting of blood, melæna, purpuric eruption, hæmaturia and albuminuria, absence of knee jerks, recurrent attacks, recovery.

This boy was admitted to hospital on December 10, 1894, with the following history. Three months previously his mother noticed a rash on his skin which she considered to be due to measles. Since that time the boy had been dull and languid, and complained at times of pain in the stomach. Two months ago he began to suffer from sickness after food, and a rash came out on his arms and legs which had appeared and disappeared several times since. A few days before admission the boy became worse. He was drowsy and lethargic, complained of abdominal pain, vomited some chocolate-colored material and passed bright red blood *per rectum*. These symptoms continued until he was admitted, the abdominal pain in particular being very severe.

The patient was a healthy child when born and was suckled for eighteen months. Since then his diet had been varied and had included plenty of fruit and vegetables. His previous health had been good, and there had not been any hæmorrhage from the nose or gums, or any sign of a hæmorrhagic tendency until the present illness. There was nothing of importance in the family history.

On admission the boy was well nourished and of a good color. There was an eruption over the arms, affecting mainly the extensor surfaces, and on the feet and legs, most abundant over the ankles and the dorsal surfaces of the feet, but also on the soles. A few spots were observed on the back, the buttocks, and the abdomen. The eruption was hæmorrhagic in character, the spots varying in color from a deep red to a pale brown. They had well defined borders, did not disappear on pressure, and were not elevated above the surface. The gums were healthy and the tongue was coated with a thick white fur. Physical examination of the internal organs showed nothing abnormal, except that the boy complained of pain when pressure was made on the abdomen. Rectal examination proved

negative. On the day after admission the bowels were well moved by calomel. The motion was semi-solid, slightly offensive, and dark brown in color, but contained no mucus or blood. Later in the day there were three evacuations of blood from the bowel, partly bright red in color and partly consisting of small black clots. He complained of pain in the umbilical and right iliac regions. The urine was scanty in amount but contained no blood or albumin. Dr. McGregor, the house surgeon, drew my attention to the fact that he was unable to obtain any patellar reflex, an observation which my own examination confirmed. Two days later the boy became extremely restless in the evening and cried out with severe abdominal pain, which was relieved by a dose of laudanum. The bowels were moved by an enema, and a dark, extremely offensive motion was passed which did not contain blood or mucus. A slight trace of albumin was present in the urine.

The progress of the case during his four and a half months' stay in the hospital may be summarized as follows: Skin hæmorrhages continued to appear abruptly at uncertain intervals and presented great variety as to color, form and distribution. Sometimes these spots were bright red, at other times pink, and again brown in color. They did not disappear on pressure, faded slowly, and staining of the skin was very persistent, with occasionally slight desquamation over the areas affected. The spots were small, sharply defined, and not raised above the surface, or papular and elevated, or diffused and erythematous, or at times urticarial in appearance. There was no pain or irritation accompanying the eruption. The distribution, taking the various attacks together, affected practically the whole of the surface of the body, including the lips and the mucous membrane of the mouth, the nostrils, the eyelids and conjunctivæ, and the inside of the ears; but the parts chiefly and most frequently affected were the extensor surfaces of the arms, the buttocks, the front of the legs and the dorsum of the feet. On twenty-five different occasions there were fresh hæmorrhagic outbreaks on the skin.

Attacks of severe abdominal pain occurred eleven times, and were accompanied or followed by vomiting of blood-stained matter, or the passage of blood from the bowel, more frequently the latter. This pain was paroxysmal and griping in character and was referred to the umbilical, the epigastric,



or the right iliac regions. During an attack the abdomen generally was tender on pressure. The act of vomiting or the passage of blood from the bowel gave temporary relief, and occasionally the action of an enema gave a similar result. The onset of an attack was usually preceded by a period of drowsiness, lethargy, and irritability. On one occasion cerebral symptoms supervened, the patient struggling, screaming and complaining of pain in his head, which he was unable to localize. This attack lasted for a few hours and was not repeated.

The urine, during the first three weeks of the patient's stay in hospital, contained a small quantity of albumin, but no blood; during the following month blood was present twice, and after that it continued to appear in increasing amount and frequency until a short time before his discharge. The staining of the urine varied in color, from a slight smoky tinge to a bright red, and even when the guaiac test gave no blood reaction, red blood cells could usually be detected by the microscope. A distinct quantity of blood was present twenty-seven times out of a total of fifty-two examinations. The amount of albumin seemed larger than the blood present would always account for. Under the microscope granular, hyaline and blood casts were seen in great number, and also at times many large epithelial cells from the bladder and kidneys, urates and oxalates. The amount of urine passed was normal. Examination of the blood proved negative, and no retinal hæmorrhages were detected.

The boy's general condition throughout the illness was by no means unsatisfactory, and far less did it correspond with the somewhat grave local conditions described. He was slightly anæmic, but otherwise looked well, and apart from the periods of drowsiness accompanying the hæmorrhagic attacks, he was as a rule bright and cheerful. The temperature during the first week was slightly raised, but afterwards all pyrexia ceased and the morning temperature was frequently subnormal, 96°-97° F. A point of some interest was the absence of both knee jerks during the first seven weeks of his stay in hospital. At the end of that time they were elicited, at first on the right side, and a few days later on the left, and from that time the reflex gradually became more and more active. When discharged on April 27, 1895, he was in very good health, the only remaining evidence of disease being a slight



trace of albumin in the urine. He was seen again in June, 1896. There had been no fresh hæmorrhagic outbreaks or attacks of abdominal pain. The urine was strongly acid, and contained albumin and oxalates. No tube casts or blood cells were detected.

Case II.—A female child, aged seven years. Abdominal pain, vomiting of blood, melæna, bleeding from the nose and gums, purpuric eruption, albuminuria and hæmaturia, absence of knee jerks, recurrent attacks, recovery. Relapse two months later, similar symptoms, intussusception, suppurative peritonitis, death, necropsy.

The girl was admitted to hospital on the 11th of February, 1895. Five weeks previously she returned from school complaining of pain in the stomach, became sick, and vomited blood. Dr. E. W. Whitlock, of Kensington, was called in and has kindly supplied the following notes: The patient's temperature was 103° F., her pulse 130 to 140, and she was suffering from bleeding from the bowel, accompanied by severe epigastric pain. Over the legs and arms there were erythematous-looking patches, varying in color from a bright to a dark purple red or pale brown. Other hæmorrhages occurred during this attack, namely, from the gums and nose, and fresh petechiæ appeared on the trunk and limbs. The illness caused anxiety chiefly from the intense epigastric pain and the great loss of blood from the bowel. There was no albumin or blood in the urine. The hæmorrhages gradually ceased; but three weeks later she had a relapse and was sent to hospital.

The child's previous health had been good and she had had no special illness. There was no inherited tendency to any form of the hæmorrhagic diathesis, and the family history was good.

When admitted the patient was fretful, disinclined for any exertion, and complaining of pain in the umbilical region. She was thin but of good color. Over the extensor surfaces of the arms and forearms were numerous brownish spots like fading petechiæ. A bruise-like mark existed over each elbow, and numerous small hæmorrhagic spots were present on the feet and ankles. The throat was slightly congested, the tongue furred, and the gums were covered, near the teeth, with a thin white film, which came off easily and left a raw bleeding surface. Nothing abnormal was detected on abdominal examina-

tion. The knee jerks could not be elicited. The urine contained a large amount of albumin and urates, but no blood, and on microscopic examination many blood, granular, and hyaline casts were visible. The other internal organs appeared to be healthy.

The course of the illness, during a stay of three months in the hospital, was as follows: Fresh purpuric eruptions appeared on eight occasions, and were at different times macular, papular, erythematous, or urticarial, but unaccompanied by pain or irritation. They affected chiefly the arms and legs, and during the time that the eruption was fading, a branny desquamation was occasionally observed. Abdominal pain of a marked character was complained of two or three times, but no hæmorrhage from the bowel occurred during the patient's stay in hospital. Three days after admission the urine contained blood, and hæmaturia persisted in varying amount until the week of the patient's discharge. Its occurrence was noted 46 times out of 54 examinations. The urine was usually acid, of a specific gravity of 1020-1025, and normal in amount. Tube casts in great variety and epithelial cells from the bladder and kidneys were often found. At the end of two months the patellar reflex, which had been absent since admission, was obtained on both sides, and was not again lost, although it never became as active, as normal. There were no retinal hæmorrhages, and examination of the blood proved negative. The temperature during the first two months rose at night to between 99° F. and 100° F., but there was never any marked pyrexia, and during the last three weeks the temperature was normal. The child's general health improved steadily, notwithstanding the loss of blood by the kidneys; she gained thirteen pounds in weight, and when discharged, on the 6th of May, she was fat and rosy. There was still a trace of albumin in the urine; but when she was seen a month later this also had disappeared, and there had been no recurrence of the other symptoms.

The patient was readmitted on August 21, 1895, having been seized a month previously with sickness and abdominal pain followed by melæna, hæmaturia, and skin hæmorrhages. She was pale but not markedly anæmic. Numerous purpuric spots of the macular and papular type were present over the extensor surfaces of the elbows and knees, on the soles of the

feet, and to a less extent on other parts of the body. There was a faint pulmonary systolic murmur, but the heart otherwise was normal. The tongue was coated and the breath foul. Abdominal examination revealed nothing abnormal. The motions were loose and offensive, and contained some blood-stained mucus. The knee jerks could not be elicited. From August 21st until September 5th the child continued to have attacks of bleeding from various organs, similar to those described in the previous illness. There was vomiting at times, and diarrhœa, with offensive motions, was often present. Abdominal pain of a spasmodic character occurred at short intervals. It was referred to the umbilical region, and was so severe as to require frequent doses of morphia in order to relieve the patient's sufferings. The abdomen was soft and flaccid, and could be thoroughly palpated; but no localized thickening or tenderness could be detected. Sometimes the examination would be interrupted by an attack of colicky pain, which lasted a few minutes and then passed off. Hæmorrhage from the bowel occurred on several occasions, never excessive in amount, and usually associated with more or less severe colic. Purpuric spots appeared and disappeared, and at one time there were raised masses over the front of the knees and the back of the elbows, formed of hard papules as large as a split pea, and of a dark red or black color. The application of a hot fomentation to the abdomen produced a most extensive extravasation of blood in the abdominal wall. The urine contained a trace of blood, and a large amount of albumin, but signs of inflammatory renal disease, such as œdema, oliguria, etc., were entirely absent. The temperature during the period was normal as a rule, and never rose above 100° F.

On September 6th tenesmus became marked and continued irregularly for some days. This was accompanied by the passage of blood from the bowel in larger quantities than before, the amount on one occasion being six ounces. Thirst and sickness were prominent symptoms; but there was not obstruction of the bowels, the motions being frequent, loose and offensive. The temperature rose to 102° F. and continued to fluctuate considerably during the following week. On the 17th of September she was removed from the convalescent home to the hospital. For the next two days the temperature fell steadily and no more hæmorrhage took place, but on the evening of the

19th a severe general convulsive seizure occurred and the temperature rose to 104° F. The fit lasted for three hours, the patient was quite unconscious, and blood was passed *per anum*. During the attack the knee jerks were exaggerated and ankle-clonus was present. The illness terminated fatally three days later, and during this period the girl remained in an almost comatose condition, the urine and fæces being passed involuntarily. At the moment of death vomiting took place, the matter ejected being stercoraceous in character.

An examination of the body was made eighteen hours after death. It was well nourished, and numerous purpuric spots and patches were visible on the trunk and extremities. On opening the peritoneal cavity some foul gas escaped. The whole of the peritoneum was covered with pus and lymph, and some five ounces of pus were lying free in the cavity of the pelvis. The small intestine was distended and the lower bowel was collapsed and empty, with the exception of the rectum, which contained fæces. At the ileo-cæcal valve there was an intussusception, the cæcum and part of the ileum being invaginated into the colon for about four inches. The mass thus formed was surrounded by adhesions, and in reducing the intussusception the bowel was ruptured in several places. The part of the intestine involved was empty, the walls were much thickened, black, hæmorrhagic and gangrenous in appearance. The vermiform appendix was also involved, but its walls appeared to be simply congested and thickened. The wall of the rest of the colon was normal in appearance, except for a number of small, superficial, clean-cut ulcers on the mucous surface, without any local thickening, but with a leash of congested vessels surrounding each ulcer on the peritoneal surface. The kidneys were slightly larger than normal and appeared to be fatty. The liver was large and fatty. The brain was generally congested and œdematous, but otherwise normal. Careful examination revealed no hæmorrhage or other sign of disease in the rest of the body. Some of the diseased tissues were laid aside for further examination, but owing to the advanced stage of decomposition and imperfect preservation they were not of much value. This applies more particularly to the part of the intestine intussuscepted. Regarding the kidneys, I am indebted to Mr. J. Jackson Clarke for the following report: "The sections of the kidney showed a

normal structure except in one particular, namely, that there was blood in the lumina of many of the tubules. This was especially marked in those of the medullary portion, *i. e.*, in the collecting tubes."

The occurrence of intussusception is not common in connection with purpura hæmorrhagica and calls for special comment. As the intussusception was not recognized until after death, it is difficult to trace back the symptoms dependent on the condition, but the following facts may be mentioned: About a fortnight before the patient's death, tenesmus, which had been occasionally present during the colicky attacks, became very pronounced, and was accompanied by a rise of temperature to 103° F., and the passage of much blood from the bowel. There was no complete obstruction, but the motions were loose and offensive. Tenesmus, irregular pyrexia, melæna, and diarrhœa continued for a week, followed by slight amelioration for three days, and then the patient had a prolonged convulsive seizure, after which she remained in a more or less unconscious condition until her death. The presence on post mortem examination of suppurative peritonitis and a ruptured intussusception has led me to explain these clinical symptoms in the following manner: The fatal attack was probably introduced by hæmorrhage into the wall of the intestine near the cæcum, leading to paralysis in the affected part and to increased muscular contraction in the adjoining portion of intestine. As the result of these strong muscular contractions the sound part of the intestine became invaginated into the paralyzed and hæmorrhagic portion. The obstruction in the bowel was not complete, as evidenced by the passage of fæces; but the circulation in the intestinal wall was interfered with to such an extent that first of all gangrene and later rupture of the bowel took place, an occurrence which was marked clinically by a convulsive seizure and was followed by suppurative peritonitis and death.

I do not bring forward this explanation on purely theoretical grounds, for the condition of the parts at the necropsy was strongly confirmatory of it, and further, it has been already suggested by Vierhuff⁶ in connection with a somewhat similar case. Vierhuff's patient was an adult who, in the course of an attack of purpura hæmorrhagica with intestinal hæmorrhage, developed all the signs of intussusception.

Treatment failed in reducing the intussusception, but the patient recovered after passing the affected portion of bowel, which had separated in course of time. From this case Vierhuff infers that he has found in purpura hæmorrhagica a new cause of intussusception, and assumes that a hæmorrhage had occurred in a part of the bowel, leading to paralysis and dilatation and the consequent invagination of the upper healthy and contracting segment of bowel. Another case of interest in this connection has been recorded by Dr. William Milligan.⁶ A man, aged fifty-three, while suffering from purpura hæmorrhagica, was suddenly seized with pain in the right lumbar and iliac regions, which persisted until his death on the following day. At the necropsy, the lower half of the small intestine was found to be extremely congested, and towards the ileo-cæcal valve was almost black. The cæcum and ascending colon were also of a very dark color. A large quantity of blood, partly fluid and partly clotted, was present in the lower two feet of the small intestine, in the cæcum, and in the ascending colon. On comparing these three cases, it will be noted that all the patients were suffering from purpura hæmorrhagica with extensive hæmorrhage in and around the cæcum. Dr. Milligan's patient died soon after the onset of intestinal hæmorrhage, and before further developments had time to take place. From the clinical symptoms in Dr. Vierhuff's case, he diagnosed hæmorrhage into the wall of the intestine and intussusception as the result, and his opinion that in purpura hæmorrhagica there lay an unsuspected cause of intussusception, is strongly supported by the signs presented during life and after death in the case I have related at length.

Case III.—A female child, aged ten years. Abdominal pain, sickness, epistaxis, melæna, purpura, hæmaturia and albuminuria, articular pain and swelling, recovery.

This patient was admitted to hospital on February 11, 1888. A month previously she returned from school complaining of "pain in the stomach" and sickness. Severe attacks of abdominal pain continued to recur at irregular intervals, and were accompanied or followed by sickness. There had been no vomiting of blood, but bleeding from the nose occurred at times during an attack. Pain and swelling of the knees and headache had also been present. A week after the onset she noticed an eruption of red spots on the legs which

gradually faded away. A fortnight later there was another similar eruption, this time affecting the arms and the legs. The spots had never been painful, but a feeling of itchiness was sometimes produced by them.

Her previous health had been good. She subsisted chiefly on mutton, soups, eggs, porridge, cornflour and tea, and during the fortnight before admission she had plenty of milk and oranges. There was no evidence in the family history of the existence of a hæmorrhagic diathesis.

The patient was a delicate looking child, with a somewhat pasty complexion, but no evidence of anæmia. There was no œdema, or jaundice, or affection of the gums. Over the forearms and the lower parts of the upper arms, chiefly on the extensor surfaces, the dorsum of the feet, and the front of the legs and thighs, there was a diffused eruption of spots, varying in color from a bright red to purple, and in size from a minute speck to half an inch in diameter. The urine was acid and contained blood and albumin. Microscopic examination revealed the presence of blood cells and casts, numerous urates, and oxalate of lime crystals.

On February 15th, four days after admission, there was a fresh outbreak of purpuric spots over the right arm and the buttocks, unaccompanied by pain or any other symptom. The spots were bright red in color, for the most part small, and faded away in the course of a few days. Similar outbreaks occurred as follows: On the 16th on the arms, on the 19th on the legs and thighs, on the 25th on the forearms; and on March 1st on the extensor surface of the elbows. The patient was seized with severe abdominal pain on February 26, the day after one of the purpuric outbreaks, and this was soon followed by the passage from the bowel of a large quantity of blood. The pain recurred several times that day, and was accompanied, on three occasions, by a discharge of blood *per rectum*. Sickness occurred twice, the vomited material being a greenish fluid. During the following night there were three more bloody evacuations, but after that no further recurrence took place while the patient remained in hospital. She was left somewhat anæmic after this attack, as a considerable quantity of blood had been lost. Rectal examination showed nothing abnormal. The slight amount of blood in the urine, which was present on admission, soon disappeared entirely; but the

albumin persisted, varying from one-third to one-twelfth on boiling, and when she left there was still a distinct trace. A small subconjunctival hæmorrhage was noticed in the right eye on February 29th. Examination of the blood proved negative and no retinal changes were perceptible. The temperature was normal throughout. When discharged on March 12th she appeared to be in fairly good health.

This form of purpura hæmorrhagica is a chronic affection, arising without obvious cause or antecedent illness; characterized by recurrent attacks of hæmorrhage in the skin, the stomach, the intestine and the kidneys, by severe colicky pains, and sometimes by pains in the back, limbs, and joints, and terminating usually in recovery, rarely in death.

The onset of the illness is frequently sudden. The child is seized with acute abdominal pain, or with violent sickness and vomiting, or a crop of spots appears on the extremities. In other cases there is a preceding period of a few days' duration, when the patient complains of drowsiness, general aching pains, and malaise.

The symptoms affecting the alimentary tract are always of a marked character. The abdominal pain is severe, of a colicky character, and is referred to the umbilical, the epigastric or the right inguinal region. The patient cries out, tosses about, presses his hand on the abdomen or presses the abdomen on the bed. Sickness soon follows, of an exhausting nature, and frequently the vomited material is blood-stained or consists of blood entirely. The tongue rapidly becomes thickly coated, the breath is offensive, and all appetite is entirely lost. At first constipation is marked; but in a few days, with or without the employment of aperient medicine, diarrhœa sets in, the motions are offensive and blood-stained, and soon pure blood is passed, it may be in large quantity, from the bowel. The act of vomiting, or an evacuation of the bowels, seems to give temporary relief to the abdominal pain. The abdomen is usually retracted, tenderness may be present on pressure over the region of the colon, especially if tenesmus is a marked feature, as sometimes happens, but as a rule there is nothing abnormal to be detected on physical examination. Such an attack may last for a few hours or a few days, and then there is a gradual remission of the symptoms until the next attack.

Hæmorrhage from the kidney appears later in the course of

the affection, and is apt to be persistent in character, although the amount of blood passed varies from time to time with the remission and exacerbation of the other symptoms. Albuminuria is, of course, present, and sometimes this seems to depend partly on renal irritation and not merely on the presence of blood. Tube casts are present in great variety, epithelial, blood, granular and hyaline. The other symptoms of acute nephritis are absent as a rule, but in some cases a real nephritis is established and becomes permanent.

The skin hæmorrhages differ in some respects from those met with in the common forms of purpura. They are, as a rule, lighter in color and of a blotchy character, so that the eruption might easily be confounded with that of measles. The distribution is also rather characteristic, a special preference being shown for the extensor surfaces of the large joints—namely, the hips, the knees, and the elbows. The type of the eruption varies greatly at different times. There is often a diffused erythema, with raised wheals of an urticarial character, which subside later into papules or nodules with a dark center. Dr. Bristowe was so much struck by this urticarial character that he described his cases as “Purpura Urticans.” The eruption appears suddenly, now in one place and again in another, is not accompanied by pain or irritation, fades slowly, and is often followed by a fine, branny desquamation. Continuous pressure, or injury, or hot applications, may produce extensive extravasations of blood in the subcutaneous tissues. In marked cases the distribution of the eruption may be universal over the skin, and small hæmorrhages may also be detected in the mouth, the nose, the conjunctivæ, and the ears.

The joints were found to be affected in the majority of Henoch's cases. The occurrence of pain and tenderness in the joints, swelling in or around the joints, and œdema of the hands and feet, led him to associate this form of purpura with rheumatism, although he is not prepared to say what the connection is. Dusch and Hoche, in an exhaustive article on “Henoch's Purpura,” give a synopsis of forty-four published cases, and in only five of these were the joints unaffected. Out of four cases I have had the opportunity of observing carefully, in only one was there a history of pain and swelling affecting the joints. During the whole course of treatment in hospital there were no arthritic manifestations, and the same re-

mark applies to the two cases recorded by Bristowe. In Henoch's cases the joint symptoms were most marked at the beginning of the illness, were transitory in character, and were not associated with other definite rheumatic manifestations, such as would certainly have accompanied rheumatic arthritis in children. It seems probable, therefore, that the joint symptoms may be dependent on a general infective disorder, and may be compared to a similar condition found in connection with certain cases of scarlet fever, septicæmia, pneumonia, etc.

The course of the disease is not as a rule characterized by marked elevation of the temperature, and in many cases the temperature continues normal throughout. Sometimes there is considerable pyrexia at the outset of the illness, and a slight rise of temperature for a short time with each recurring attack. Marked prostration accompanies the commencement of the illness and the separate attacks, but in the intervals the patient recovers rapidly and the general health is quickly restored. Cultivation experiments and microscopical examination of the blood have so far failed to reveal anything abnormal. In addition to the hæmorrhages already described, bleeding may take place from the nose, the lungs, etc.; but there is not the same tendency to continuous oozing of blood, or the same general distribution of the hæmorrhages as one meets with in other varieties of purpura hæmorrhagica. I have never detected retinal hæmorrhage.

The prognosis is, as a rule, favorable, the disease tending to recovery quite apart from any special treatment. Death may occur from loss of blood, from nephritis, from intussusception, from perforation of an intestinal ulcer, or from intercurrent disease, pneumonia, etc.

No treatment has as yet been discovered which affects directly the course of the disease. Rest in bed, low diet, mild purgatives, combined with intestinal disinfectants, and opium or morphia to relieve pain and calm the system, represent the chief therapeutic measures which have hitherto proved beneficial.

¹ Berlin Klin. Wochens., 1874, No. 51, and Vorlesungen über Kinderkrankheiten, 1883.

² Gaz. Hebdom. 1876, xiii.

³ Pædiatrische Arbeiten, 1890, p. 379.

⁴ Med. Times, 1885, Vol. i, p. 599.

⁵ St. Petersburg Med. Wochens., 1893, No. 41.

⁶ The Lancet, 1888, Vol. ii. p. 864.

AN UNUSUAL CASE.

By JOSEPH W. WILLIAMS, A.M., M.D.,
Paterson, N. J.

THIS brief history of a case occurring in my practice seems worthy of note, both on account of its unusual nature and as illustrating the well-known power which most children possess of surviving severe illness without any particular treatment, or, as one might more aptly say, in spite of treatment.

April 5, 1896, the subject of this sketch was delivered by me with forceps. Extraction was necessarily hurried on account of the mother presenting a large hematoma of the vulva, which ruptured and gave rise to severe hemorrhage.

The child was asphyxiated and respiration was established only after forty minutes hard work.

It was found, shortly after birth, that beneath the caput succedaneum, was a cephalhematoma covering almost the whole of the left parietal bone. The day after its birth the child developed a temperature of a variable type, averaging about 101° F. There was tetanic contraction of the muscles of the upper extremities and the head was held rotated to one side.

These evidences of central disturbance disappeared in a day or two, the temperature, however, still remaining quite high.

About the seventh day there appeared symptoms of septic infection at the umbilicus followed by a most intense icterus.

April 17th, there was noticed a decided edema, most pronounced in the lower extremities. There was almost total suppression of urine.

Dr. A. Jacobi, who saw the child next day, found the urine to contain albumin, a few blood cells, and some cells from the renal pelvis, and the diagnosis of acute Bright's disease was confirmed.

This condition of the kidneys disappeared in less than two weeks, without treatment of any kind.

April 25th, there being evidence of pus formation in the cephalhematoma I aspirated the tumor, and found the contents to consist of disorganized blood and pus; accordingly I made two incisions at the base of the tumor and inserted a drainage tube.

Under repeated irrigation with boric acid solution all evidence of the cephalhematoma, with the exception of the bony ring, had disappeared in less than a week, and the child's temperature, which had been elevated all this time, soon fell to the normal and remained there.

The next day there was found a double inguinal hernia.

A month or two later there was found a hydrocele of the cord on one side.

September 9th, I was sent for and found the child with a mild dysentery. The temperature was 102° F. in the rectum.

In two days the stools became more natural, but the temperature kept rising, soon reaching $105\frac{2}{3}^{\circ}$ F. Treatment consisted of small doses of cupric sulphate and opium, together with irrigation of the large intestine.

On the fourth day I found in the stools fragments of membranous deposit which had become detached, probably from the large intestine, some of the fragments being over one inch in length, and one surface, evidently that which had been adherent to the gut, being studded with minute coagula of blood. These pieces of membrane averaged about a line in thickness.

Microscopically the membrane was composed of mucus, fibrin, pus cells, a few red blood cells, and epithelial cells of the columnar type.

By the sixth day these fragments of membrane were no longer passed; the stools became quite natural although somewhat watery, but still the temperature ranged about 105° F. Inunctions of guaiacol and glycerin reduced the fever quite promptly, but the effect was of such brief duration that not much good was accomplished by its use.

The child died on the ninth day. I might add that during all this time there were no decided cerebral symptoms and the stomach retained food nicely, the child taking the bottle quite greedily.

A CASE OF ACUTE MIDDLE EAR DISEASE SIMULATING INTRA-CRANIAL DISEASE—HYPER-PYREXIA.

By GEORGE CARPENTER, M.D.,
London.

ON June the 24th, 1895, Daisy R., aet. 14 months, was brought to me at the Evelina Hospital, by her mother, with the following account. The mother was subject to epileptic fits. On June the 20th, the child fell from a chair, and received a blow on the back of the head. She was not insensible after the accident, and cried for a short time only, but she was sick after the fall and twice the day following. After the mishap she remained in her usual health until the next day, when she was found to be drowsy, which, increasing, left her in the position presently to be described. On the evening of June the 22d the father, in aiming a blow at the mother, was supposed to have missed his mark and struck the child, who was on her lap. Whether he did so or not the child's ear was found red and swollen the next morning. According to one account twitchings were noticed in the arm and leg of the left side of the body on June the 21st, according to another they were not seen until two days later. Previous to the accident the child had been considered strong, and she had never been ill. When I first saw her she was quite comatose. Her face was pale, her extremities were cold, the pupils were equal and reacted to light, the pulse quick but not irregular, the respiration shallow and irregular, the head retracted, and the temperature 102 F. The left ear was red, and blistered in the upper half, and apparently bore silent witness to the severity of the blow received.

As she lay on the couch the following observations were made. There were slight kicking movements of the left leg, and twitchings now and again. There were very slight twitchings of the right hand, also of the left upper extremity and shoulder. The right leg lay in the usual position of ease and it remained, for the most part, quite quiescent; but one or two movements of the foot were detected. The abdominal muscles twitched. The movements were for the most part on the left side, but not entirely. The left leg was possibly more resistant

to passive movements than the right. The arms were held across the chest, one was not more resistant than the other, but they were decidedly more rigid than the legs. Manipulation of the extremities certainly seemed to induce rigidity, though slight, on the left side. There was doubtful ptosis of the left eye, but apart from this nothing abnormal, as far as the ocular muscles were concerned, could be detected. An ophthalmoscopic examination revealed a healthy fundus oculi. Examination with the otoscope did not throw any fresh light upon the matter, and I did not detect any abnormality. Beyond slight rickety indications further examination proved satisfactory. She was taken into hospital and it was found that there were convulsive twitchings on *both* sides of the body.

Reflex movements of the limbs were obtained on stimulation; the child drew its left arm and leg away from the stimulus, but its right leg and arm were not withdrawn though there were contractions of the muscles on its application. Protruding movements of the tongue were noted. The left knee-jerk was very slight, sometimes unobtainable. The right knee-jerk, on the contrary, was rather brisk. Both arms and legs when raised from the bed fell down as a dead weight. The left arm was slightly rigid, and occasionally the eyes became fixed towards the left. My first impression was that I had to deal with a case of meningeal hemorrhage, the history of trauma being so very precise, and the onset of symptoms in sequence to this lent additional weight to the primary assumption. The fact that tubercular meningitis, in my experience, so frequently quickly succeeds a *history* of head injury in the young at once came to my mind and had the effect of dashing cold water on the first impression. However, fully recognizing the fact that, in some instances, it is a herculean task to decide between meningitis and meningeal hemorrhage in the young—common as meningitis is on the one hand, and rare as meningeal hemorrhage is on the other—for their symptoms are much alike, I thought it only right to seek the assistance of my colleague, Mr. Eve, with a view to a surgical opinion. Mr. Eve's opinion was that there were no sufficient indications for trephining.

Medical treatment was adopted, and an ice-bag applied to the head on the 25th. Her temperature at 6 p.m. was 104.8 F. and at 12 p.m. 106.6 F., when her pulse became very weak. During

the day of the 26th she was slightly sick once. The right extremities were quite hot and the left very cold. Twitching was more marked on the left side of the body. The pulse was very weak. The temperature showed no signs of abating, and was 107.6 F. at 12 noon. The eyes were fixed and squinted at intervals. The following night the pulse was frequently imperceptible at the wrist, the breathing labored, the face twitching, and the extremities cold. She died at 10.45 a.m. on the 27th.

Autopsy.—Brain. On removing the skull-cap a small amount of cerebro-spinal fluid escaped which was blood-stained. The surface of the brain was not congested, nor was it sticky. The lateral ventricles contained no fluid. On section it appeared normal. On opening the petrous bone a localized collection of pus was seen in the middle ear. The tympanic membrane appeared healthy—there was no appearance of rupture. Patches of collapse were present in both lungs. The stomach was stained with dark brown patches of blood on the mucous membrane. All the other organs were free from disease and no tubercles were found.

Remarks.—This case teaches a lesson which should be ever before the mind when called to diagnose a case showing head symptoms, viz.: to examine the ears as a matter of routine. A habit thus induced will presently become automatic, and sooner or later the doctor practising this routine will be rewarded by saving a life unnecessarily doomed to destruction, and the patient will greatly benefit by his declining to accept as meningitis, without a protest, everything that stalks about in the garb of that disorder. I have, I believe, saved more than one case by a timely myringotomy and evacuation of the pus. Unfortunately, in my experience, pus, as in this case, cannot always be recognized through the tympanic membrane, and the appearance of the drum may not be sufficiently removed from the normal to warrant the suspicion of an acute inflammatory process “well alight” behind it. That such may occasionally prove to be the case must in no wise prove an excuse for the relaxation of vigilance, and in a doubtful case no single examination can be considered to have absolved the doctor from all responsibility on the score of ear mischief.

PRACTICAL NOTES.

Eczema in Children.—If it is due to a discharge from the nose or ear, a wash should be given to correct such discharge, and tonics given to tone up the system for resistance to these attacks. A wash to be relied upon is the following:

R Boric acid gr. xl.
Aquæ dest oz. ii.
M. Sig.—To be used ad libitum during the day.

Or one composed of:

R Sodii bibor.
Sodii bicarb. aa gr. v.
Aquæ, q. s. ad oz. iii.
M. Sig.—To be used ad libitum during the day.

Internally, good results are obtained by giving syrup of the iodide of iron in doses of from five to twenty drops t. i. d. in water, taken through a glass tube.

Locally there is used in the acute cases a dusting powder composed of

R Boric acid,
Bism. subnit aa dr. ii.
Pulv. amyl. dr. iv.

After the acute stage subsides, ointments are given which vary in strength, such as

R Ac. salicylic. gr. v-xv.
Petrolati oz. i.
M. Sig.—Use locally twice daily.

For a child from three to eight months old, five to ten grains of salicylic acid are used to the ounce, and from eight months to a year or more, fifteen to twenty grains are used to the ounce.

For the more general eruptions of eczema over the whole body, an ointment is given as follows:

℞ Hydrarg. ammoniat. gr. v-xx.
 Pulv. zinci oxidi dr. i.
 Petrolati oz. i.

M. Sig.—To be used locally twice daily.

Where there is intense itching carbolic acid is used, from two to ten drops to the ounce of ointment. Sometimes this fails and cocaine is used, from two to five grains to the ounce.

The hands of the infant are to be wrapped up at night, and if the finger nails are long these are to be cut and kept clean.

As soon as the baby wets a napkin the cloth should be changed immediately, the parts wiped dry and a dusting powder of the above formula applied. A bath in washing soda solution is also useful to relieve the itching and burning, a half handful of common washing soda to a bucket or two of water, according to the age of the patient. If this bath is given too strong it will only aggravate the condition present, acting as a caustic.

In the chronic recurrent cases which have lasted for a year or two the following is a good ointment:

℞ Resorcin gr. xv-xx.
 Ung. picis liq.
 Ung. petrolati aa oz. ss.

Use twice daily; or sulphur may be used instead of the resorcin.

The ammoniated mercury, gr. xx to the ounce of petrolatum, or calomel, gr. xv to the ounce of petrolatum, are also useful, and if there is intense itching, carbolic acid or cocaine may here be applied with good results. The constitutional treatment also should be continued throughout.

It is a good idea to keep up the tonic treatment for several months after the disappearance of the lesion, and to warn the patients about the necessity of cleanliness.

For the condition of the scalp, produced by pediculosis, the hair should be cut off short so as to get right at the scalp, when the following ointment should be applied:

℞ Betanaphthol.
 Sulphuris aa gr. xx-xxx.
 Petrolati oz. i.

M. Sig.—Rub thoroughly into the scalp.

Ova may be seen upon the hair, which should then be removed and destroyed—small, oval bodies, grayish in color, clinging fast to the hair. A bichloride wash is also useful, 1-2000 OR 1-1000.

Ichthyol is another remedy highly recommended in chronic eczema—grains x-xv to the ounce.—ROSENBERGER, *Med. Council*, 1896, i, 181.

Eczema in Infants and Children.—S. M. WARD advises that the hair should be cut close to the head and the crusts softened either with oil or a flax-seed poultice. All tearing and forcible removal of the exudate must be prohibited. The following ointment may be used:

℞ Hydrarg. chlor. corros. grs. ii.
 Bismuth subnit dr. ss.
 Resorcin grs. x.
 Vaseline oz. ss.
 Adeps lanae q. s. oz. iss.

M. Sig.—Apply thoroughly to head twice daily and cover with a cap.

In cases when in addition to eczema capitis the face and body are attacked, do not employ ointments, but use, after a good lathering with ichthyol soap (5 per cent.)—a powder composed of equal parts of acetanilid and boracic acid combined with twice as much talc. or cornstarch. All possible sources of irritation must be corrected.

In acute cases solutions like the following are of more service:

℞ Sodii bicarb. oz. i.
 Extr. hamamelis oz. ss.
 Ac. carbolic (sat. sol.) gtt. xx.
 Spts. vini. rect. gs. oz. iv.

Sig.—Mix and use a tablespoonful to a pint of hot water for bathing. Use freely and often. — *Med. Council*, 1896, i, 179.

Editorial.

LICHEN SCROFULOSORUM.

WHILE this form of lichen is extremely rare in this country and in England, if all cases casually observed should be put on record, it would not only show that its occurrence is more frequent than is usually claimed in text-books, but might also serve to aid in clearing up most points connected with its etiology. That the diagnosis is not uniformly made with ease is well illustrated in the transactions of the New York Dermatological Society at its 249th regular meeting.

A child with a papular eruption was presented for diagnosis, and while none of the members regarded it as an instance of lichen scrofulosorum, it was admitted to bear a resemblance to this disease, and an enumeration of the other affections which it was thought to simulate included cacaetrophia folliculorum, a neurotic form of eczema, lichen pilaris, erythematous eczema, a mild form of ichthyosis, prurigo, superficial eczema, a congenital condition allied to ichthyosis or a keratosis, eczema folliculare, *neurodermite circonscrite*, and congenital malformation. To be sure all this shows that the case was not of an ordinary type. In the usual form, however, one must distinguish the condition from the fine papular syphilide, from the punctate form of psoriasis and the small papular variety of eczema, from lichen ruber, and from keratosis pilaris. Nor does one invariably have the usual concomitant manifestations of the so-called strumous state as a guide. The glandular enlargements may be absent as well as other marked evidence of a scrofulous diathesis. Among the most pronounced features upon which the diagnosis is to be based are its variety and accidental discovery, since the subjective symptoms are not such as lead to complaint. Then it seems to occur more often in boys

and the trunk is the part usually most involved, though children present lesions upon the extremities more frequently than do adults. The lesions do not exceed a pin's head in size, are slightly conical and surmounted by a loosely attached scale. The color of the papule is red at first, but soon becomes dull yellowish or may not differ greatly from the color of the surrounding skin. These small papules form in groups, patches, or in curved lines, representing segments of circles. This arrangement results from the fact that each separate lesion surrounds a hair follicle, and the latter are often disposed in this whorl-like manner. Confluent patches may often present the appearance of a persistent localized area of so-called goose flesh, especially before any scales have formed.

Now what is the cause of this eruption? Crocker says: "The scrofulous predisposition." Hallopeau, Darier and others have seen in the small lesion an analogous condition to that of cutaneous tuberculosis. In favor of this view is the clinical fact, that many subjects of lichen scrofulosorum have, or subsequently develop, phthisis. Against it is the benignity of the affection, as compared with other skin tuberculosis. In this connection it is interesting to note that Dr. Haushalter presented on May 27th, at the *Société de Médecine de Nancy*, a boy of three and a girl of five years, who were subjects of the disease under consideration. In the boy the lesions had a coppery rose hue, some of them being covered with thin, yellowish epidermic crusts and others with little scales. Upon both sides at the angle of the jaw there was a ganglionic enlargement of pigeon-egg size.

In the girl, who was delicate, lymphatic and slightly rachitic, there were some forty discrete papules of hemp-seed size upon the face, which is, by the way, a most unusual situation for lichen lesions. Other smaller ones covered with scales were interposed, and upon the trunk and extremities were located similar lesions, while the left arm showed three intradermic nodosities covered with skin having a violaceous tinge,

very suggestive of tuberculous gummata. Upon the back of the hand was a crusted, warty, tuberosity the size of a pea, recalling by its aspect tuberculosis verrucosus cutis.

At first the lesions upon the face were considered as an acneiform syphilide, but appropriate treatment made no impression upon them, and as many lesions upon the body were distinctly lichenoid and others manifestly tuberculous, the diagnosis lichen scrofulosorum was made. Scrapings from the lesions upon the face were inoculated in the peritoneum of a Guinea pig, which died of tuberculosis after three months. A more recent experimental inoculation from the first case has not yet been reported upon. Of course this instance may not be accepted as one of true lichen scrofulosorum; but in view of the fact that Jacobi has claimed to have discovered tubercle bacilli in one case examined, it can but strengthen the suspicion that we have here in reality a low grade of cutaneous tuberculosis.

New and repeated experiments are necessary in order to definitely settle the question, and it is to be hoped that those who see much of the skin eruptions of early life may soon be able to supply the necessary confirmatory evidence.

CHARLES W. ALLEN, M.D., New York.

THE TEACHING OF PEDIATRICS IN LONDON.

AT this season of the year it is usual for the various medical schools in London to attract by advertisements and prospectuses as large a number of new students as possible, and for medical journals to fill a considerable proportion of their columns with advice to those who are on the threshold of their hospital curriculum.

We, as a journal devoted to the diseases of infants and children, are concerned only in that particular branch of the student's education, probably the most important, and, in London at any rate, the worst taught of any of the numerous subjects which the student has to study during his hospital career.

It can hardly be disputed that, in the interests alike of the public and of the profession, every newly-qualified man should commence practice with a thoroughly practical knowledge of the diseases of infants and children; not only because children's ailments constitute a very large percentage of the work of the general practitioner, but because of the lifelong influence for good or evil which the medical treatment effects upon their future existence—nor indeed can it be maintained that the physical examination of children, which is so necessary for accuracy in diagnosis, is any easy accomplishment, or one which is likely to be mastered without considerable practice. It is then obvious that the General Medical Council of Great Britain should insist upon each and every examining body thoroughly testing the student's practical and theoretical knowledge of Pediatrics before granting him his Diploma, and that the authorities of every medical school should be called upon to provide facilities for its pupils to obtain the requisite tuition.

We at any rate are disposed to regard the diagnosis and treatment of children's diseases as amongst the most difficult of the varied duties of the general practitioner, to be learnt thoroughly only by special training, and it consequently behooves us to call attention to the attitude at present adopted towards this question by the examining and teaching authorities in London.

We must confess to a feeling of the keenest disappointment that none of the examining bodies in London insists upon the student taking out a course of special study of Pediatrics, and as we find that this grave omission in their schedules leads to an almost total neglect of the subject in the medical schools, we propose in future numbers to criticize the very imperfect arrangements which at present exist at the different general hospitals in London, and to suggest reforms which we consider are urgently required.

Society Report.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Held at St. Paul, Minn., Sept. 15 to 18, 1896.

A New Operation for Cleft Palate.—Dr. Truman W. Brophy, of Chicago, took the ground that this operation should be performed much earlier than had been the custom of surgeons heretofore. It has usually not been thought advisable to operate for the closure of cleft palate until the child has reached the age of two to five years. He maintained that when the operation was thus postponed the changes in the voice had become permanent. His operation consists in freshening the edges of the cleft, and by deep suture of silver wire fixed through a lead plate conforming to the palate, the edges of the cleft are drawn together and maintained until healing takes place. The technique of the operation was minutely explained. It is original with the author, and in his experience has proven most effectual.

Tonsillotomy by Cautery Dissection.—Dr. J. Homer Coulter, of Chicago, said that the tonsil had been one of the most prolific sources of discussion in medicine. In the past ten years over 600 papers have been written on that subject. The size of the normal tonsil is still a subject of discussion with throat specialists. Some claim there is normally no tonsil to be seen; however, the most usual opinion is that there exists normally a collection of follicles between the pillars of the fauces and protruding slightly above them. The tonsil is an almond-shaped gland larger at one end than the other and somewhat flattened.

The methods usually employed for its ablation are the guillotine, igni puncture, the cold or cautery snare, or the knife. Each of these methods have practical objections to their use. The most important of these objections, and one which applies to all of them, is the fact that the entire gland cannot be taken out. Unless this is done the part remaining will often produce as much trouble as the former condition. The operation proposed obviates this objection entirely. With

a well-heated small electrode the pillars are dissected away from the tonsil to one-half its extent. The gland is then, with suitable forceps, drawn well out and entirely dissected out. This portion is then cut off and the surface treated with a strong solution of silver nitrate. In a week or ten days the other portion of the tonsil is removed in the same manner. This operation will give cosmetic as well as practical results unobtainable by any other process yet suggested.

On the Importance of Physical Signs other than Murmur in the Diagnosis of Valvular Disease of the Heart, was the title of a paper contributed by Dr. James B. Herrick, Chicago.

Standard text-books teach that an endocardial murmur is not always an evidence of a valvular lesion, and also that a valvular defect may exist and still no murmur be present. Practically, however, conclusions are usually based upon the presence or absence of murmur. This is wrong, for there may be a valvular disease without a distinct murmur being audible, and therefore other signs than murmur must be used in determining the existence of a valvular lesion. Every valvular lesion must result in hypertrophy and dilatation of the heart behind the valve diseased. An increase in tension of the pulmonary circulation follows any valvular lesion at the mitral orifice, and, later, any aortic disease. This will show in increased force of the pneumonic second sound.

Stenosis of the orifices of the left heart means a smaller amount of blood in the general arterial circulation, therefore, lessened arterial tension.

Failure of the right heart is followed by venous congestion, e. g., venous pulse, hepatic and portal congestion, anasarca, etc.

Hypertrophy may be recognized by the heaving, forcible apex impulse. Epigastric pulsation may call attention to enlarged right heart. The jugular pulse, the hepatic and capillary pulse are all of diagnostic value. The visible pulse of aortic regurgitation is almost pathognomonic.

Palpation is important. Extra cardiac causes for murmur, such as might arise in a heart dislocated by pressure or retraction, can usually be excluded by percussion.

A weak aortic sound may be an indication of obstruction. The reduplicated second sound may point to valvular disease.

A sharply accentuated first sound at the apex is common in mitral stenosis. The peripheral tones in aortic regurgitation are a valuable confirmation.

Cases illustrating the foregoing were referred to.

Error in calling an inorganic murmur organic is readily made unless the secondary sounds are carefully sought for. The intention of the paper was not to undervalue the importance of endocardial murmur, but to insist that it is only by the complexus of symptoms that an accurate diagnosis can be made. Of all the evidences of heart disease, the least valuable is the endocardial murmur.

Dr. Babcock, of Chicago, reported a case illustrating the value of secondary physical signs in the diagnosis of cardiac diseases, and confirmed the remarks of the previous reader.

The Clinical Significance of the Child's Fontanelle.—Dr. J. A. Abt, said that in health the fontanelle does not sink below or rise above its bony frame. It has both respiratory and pulsatory movements. With increased intracranial pressure the normal bruit may quite disappear. An early ossification interferes with brain development and produces a brachycephalic skull. In rachitis the involution of the fontanelle is delayed. Marked bulging is caused by the collection of fluid within.

The abnormal retraction of the fontanelle always indicates a condition of inanition. It may be temporary; if chronic it is a serious condition. A deeply sunken fontanelle is always a danger signal in any case. Ossification occurs normally at fifteen to eighteen months. Protuberance and tension indicate meningitis.

Diseases of the Nose and Throat in Children.—Dr. W. F. Barclay, of Pittsburg, dwelt particularly on the possible results of acute and chronic purulent and muco-purulent rhinitis in children. He pointed out the necessity for more attention by the family physician, and demonstrated that almost, if not all, of the pathological conditions in the nose occurring in later life have their origin in childhood.

The paper was an unusually practical and interesting one. Children should be taught to breathe through the nose rather than the mouth. Parents should be taught that surgery can relieve, very easily, those who are unable to breathe through the nose.

Abstracts.

ON CICATRICAL STRICTURES FOLLOWING INTUBATION.

GALATTI (*Jahrb. für Kinderheilk.*, 1896, xlii, 333) said that it had been his misfortune to observe, during the last three years, in a comparatively small number of intubations (31 cases), two cases of cicatricial stricture of the larynx. This unpleasant complication might probably have been avoided in both cases if it had been possible to follow the advice of Wiederhofer, to substitute tracheotomy after the fourth or fifth intubation. The objection to this course was the great opposition of the parents to substitute a bloody operation for the comparatively simple one of intubation, particularly as the child, while wearing the tube, seemed in good health. In the second case permission to perform tracheotomy was only obtained because alarming symptoms were observed, which frightened the parents into submission. The first case died from the effects of the stricture, as operative procedure was strenuously opposed by the parents. The autopsy in this case disclosed the following: Larynx of normal width, the mucous membrane pale, presenting above the false vocal cords very narrow, slightly cicatricial indentations. One cm. below the true vocal cords, on a level with the cricoid cartilage, the lumen of the larynx was contracted to the size of a barley corn, and the mucous membrane showed well-marked scar tissue. The perichondrium of the cricoid cartilage presented also a cicatrix, and was adherent to that of the mucous membrane directly below the stricture; the lumen of the trachea was dilated and covered with a thick tenacious pus, continuing into the bronchi and completely filling the lumen of the right bronchus.

From this condition it is to be seen that the symptoms of stenosis observed during the last days of life were caused by the decubitus. That the child breathed fairly well for a few days after auto-extubation may be explained on the ground that the ulceration had not yet healed. As cicatrization progressed, the stenotic symptoms became more and more pronounced. Expectoration being hindered by the contraction at

the cricoid cartilage, the secretions mostly accumulated in the right bronchus, and caused some peculiar respiratory movements, particularly of the right side.

How do such cicatricial strictures originate? There is not much literature to be found on the subject. Prof. Wiederhofer reported four cases in 1874. The children were all over three years old. In one case the stricture improved without any treatment, another was treated by gradual dilatation for over a year and recovered; the others were still under observation. Ranke, in the discussion, said that he recollected only one case where a permanent stricture was produced through intubation out of the many hundred of cases intubated in his clinic. In this case the lumen of the larynx was permanently obliterated above the tracheotomy wound. Heubner met with only one case of stricture in 250 intubations. Bokai told the author that in over 800 intubations he only met with two cases of cicatricial stenosis following the operation.

A very interesting case is reported by Baer in his inaugural dissertation, where a girl, eight months old, was intubated by him 33 times in 20 days, and where a tube suitable for a child of 5-7 years was coughed up. The child was tracheotomized. Six days later, removal of the tracheal canula was followed by dyspnea; after an interval of six more days another attempt was made, a previous intubation being unsuccessful. A laryngotomy was therefore done, which disclosed a granulation of the size of a pea; this was removed. At the same time a tongue-shaped fold of the mucous membrane was extirpated from its posterior wall, and was the cause of the failure of intubation. After this, intubation was easily accomplished. From this day on for six months it was impossible to permanently extubate. The tube had to be replaced at intervals of one-half hour to $6\frac{3}{4}$ hours; at one time 24 hours passed before it was necessary to reintubate. Commenting on this case, Baer says: "This case can surely not be classed among those where a late tracheotomy is done on account of decubitus. The cicatricial contraction occurred later on; at the time tracheotomy was done there was no cicatricial stenosis present. This case, however, demonstrates how long a tube may be worn without producing decubitus. The cicatricial stricture developed after the laryngotomy, on a site where the tube could not have produced pressure. Contrary to Baer's experience, the author's

two cases developed a cicatricial stricture after a comparatively short duration of intubation, particularly in the second case. In the first case the tube remained in situ 436 hours, in the second 213 hours, a space of time which, though exceeding the usual duration of intubation, does not reach the maximum time reported by others, where no decubitus resulted. The author thinks he may be allowed to assume, that the cicatricial stricture in both his cases developed as a consequence of pressure ulceration. The literature on the subject, as well as the clinical symptoms of the causes of decubitus are so meagre, that it is impossible to diagnose its presence during life. Even the pathological anatomy presents very few points to elucidate this important question.

We know that ulcerations of the laryngeal and tracheal mucous membranes occur in a number of infectious diseases, for example, in typhoid fever, variola, scarlatina and diphtheria. During the healing of such ulcers strictures are liable to develop. If these ulcers occur in the neighborhood of the cartilaginous portion of the larynx, there follows later a perichondritis, which produces, anatomically, cicatricial contractions of the soft parts, or a callous thickening; symptomatically, pain with the swallowing of solid particles, and disturbance of the respiration. Later, however, a permanent stenosis may follow. If we find such ulcerations in a child which has been intubated or tracheotomized, we naturally are inclined to attribute it to the foreign body. But why should this occur only in exceptional cases? Practically the position of the tube, being held at the level of the cricoid cartilage, favors the occurrence of decubitus in this region, besides rupture of vessels, ecchymoses in the submucous tissue may have some influence in promoting the formation of ulcers. Besides the anatomical peculiarities of the mucous membrane, there may possibly be external causes to favor the occurrence of decubitus in one case more than in another. The stagnation of mucus and its decomposition by bacterial infection may produce chemically an irritation of the tissues of the mucous membrane, and give rise to local disease of the submucous vessels (necrobiosis) from a migration of bacteria into the cellular tissue. The ulcers being once formed, it is easy to see how the presence of a foreign body may cause its extension. If now the tube be removed and the constant pressure taken off the ulcerating surface, the

sprouting granulations may, in a relatively short time, produce a cicatrix, and thus a narrowing or even total obstruction of the small lumen in the larynx of the child occur. It is worthy of note, that the greatest number of recoveries with intubation, the duration of intubation was relatively short. The average duration in 17 recoveries was $73\frac{1}{3}$ hours. About the same ratio is given by Bókai. Dillon Brown's cases averaged about $123\frac{1}{2}$ hours; Heubner's 100 hours. Mount Bleyer extubated in $79\frac{1}{3}$ per cent. of his cases, and Baer in 64.5 per cent., within 120 hours; Ranke, in 72.5 per cent., within 96 hours.

Why is it, that in a certain number of cases, the tube may be removed in a relatively short period, while in others permanent extubation is impossible, and we must continually reintubate, or take refuge in tracheotomy? It is generally conceded, that the diphtheritic process in the larynx is only of short duration in the greater number of cases, and with the amelioration of the local process, the chances of an early extubation increases. If, however, complications arise and are added to the diphtheritic process, as fever, debility and local swellings, it runs a longer course, and naturally will postpone an early extubation. Another important factor is the nervous one, which may produce continued dyspnea after removal of the tube, even when membrane is no longer present. One of the advantages of intubation is that in favorable cases the tube may be coughed up in a few hours, or may be permanently removed without the necessity of a reintubation, while in tracheotomy, the canula must be kept in situ for a much longer period. The following are some of the causes which may necessitate frequent reintubation:

1. Diphtherie à forme prolongée.
2. Recurrent diphtheria.
3. Chorditis inferior.
4. Formation of granuloma.
5. Displacement of the trachea. Changes in the form of the trachea, or larynx, caused by operative interference and the tube.
6. Flaxity of the anterior tracheal wall.
7. Stenosis due to external pressure.
8. Cicatricial stenosis.
9. Primary and secondary diphtheritic paralysis of the larynx.

10. Habit-paresis.
11. Fear of the removal of the tube.
12. Spasm of the glottis.

In many cases, even a laryngoscopic examination cannot determine any anatomical cause for the necessity of continual reintubation, or replacement of the tracheal canula. In such cases we can only attribute the difficulty to some disturbance of the innervation. Motor palsies they cannot very well be, as this would surely be revealed by the laryngoscope. Spasm of the glottis is undoubtedly present in many cases, which may not only be the result of a rhachitis, but due to an hereditary influence from alcoholic parents. Possibly there may be occasionally a cerebral influence which determines disturbances of innervation. The child who has been accustomed for days or weeks to breathe through the tube or canula, is unable to perform the automatic act of breathing at once, on the removal of the auxiliary, by making a voluntary effort to catch its breath; the sudden removal of the tube may also produce a momentary shock and inhibit the respiration; besides this, external causes may be operative, as fear, etc.

Further causes, which may contribute to the difficulty, might be sought for in the muscular system brought into play during respiration. This may be weakened from disease, notably the intercostal muscles and the diaphragm. Paresis of the latter is well known in the course of a diphtheria. A mechanical difficulty may be mentioned which might interfere with the muscles of respiration, namely, great convexity of the diaphragm, due to distension of the abdominal organs (meteorism, etc.). A peculiar symptom is the repeated auto-extubation in some cases. This occurrence is so much more remarkable, as children do not throw out the tube in the greater number of cases, notwithstanding the presence of an obstinate cough. The reason why an auto-extubation is frequently not repeated, is sometimes readily explained, for example, if a tube is coughed up and is followed by a membranous cast, which has forced it out mechanically. Sometimes the child, after relieving itself of the tube, breathes normally and does not need its reintroduction, which may be explained by a loosening of the tube from retrogression of the swelling of the mucous membrane of the larynx.

The numerous auto-extubations in the author's two cases,

however, appeared at a time when the diphtheritic process must have ended, and without any assignable cause. It occurred only after a protracted period of intubation, and one is tempted to look upon this symptom, at this time, as suspicious, as a signal, so to speak, to look out for further complications.

As regards the therapeusis of a cicatricial stricture following intubation, prophylaxis would be the first consideration in endeavoring to avoid the decubitus, which in one sense is the primary cause of the stricture. Some authors commend the performance of tracheotomy on the fourth or fifth day of intubation, if the tube cannot be permanently removed at that time, so as to shorten the duration of intubation. Others think the performance of tracheotomy only justified when there seems no hope that the tube can at any time be permanently removed, leaving entirely out of consideration the length of the intubation period. It would in most cases be a very difficult question to decide, when tracheotomy is indicated, according to the latter rule, particularly as it is usually impossible to diagnose the presence of a decubitus. In the author's cases, there were no symptoms of a commencing decubitus, unless the frequent auto-extubation be considered as such. Both opinions above mentioned demand some consideration; the first lays most stress on prophylaxis, while the other may save some children from a bloody operation. Each physician will naturally be guided by his individual opinion and experience founded on previous cases. If the physician decides to do a secondary tracheotomy, it would be well to satisfy himself of the permeability of the larynx, which is most easily done by an attempt at intubation. The proceeding of Bokai seems very rational, who makes a daily intubation of short duration, after a secondary tracheotomy, to prevent the formation of a cicatricial stricture. Should it be impossible to intubate even with a small tube, an examination with the laryngoscope would be proper, followed by probing of the larynx. We must always bear in mind that frequently even this will not be possible, for on contact with the probe, the glottis reflex will close it. Should this happen, we may introduce the probe through the tracheal wound. It may be that the probe can in this way pass the stricture, or both devices may fail. In the latter case, there is probably a total occlusion of the larynx.

When the presence of a stricture is proven there are two ways to deal with it. Either gradual dilatation or laryngotomy. If a complete occlusion is diagnosed, surgical measures must be instituted for the excision of the cicatrix. As this may however, produce more cicatricial tissue, it will be necessary to follow it by further intubation, or the introduction of some solid body, to prevent contraction of the wound.

TREATMENT OF THE MILK INFECTIONS.

MCKEE (*Phila. Polyclinic*, 1896, v, 371) says that in cases which are presumably due to milk infection, it is obviously necessary that milk should be withdrawn from the diet. This is an absolute rule, and admits of no deviation. In some cases it need be discontinued but twenty-four or forty-eight hours; in the most severe and in long-continued cases, it will be necessary to exclude it for a longer time. In the interim raw beef-juice may be given in dram portions every two or three hours. For twenty-four hours this alone will serve, but where milk is abolished for longer periods, we can supplement the juice with egg albumen, the beaten white of egg, or albumen water.

Thirst is usually excessive in all cases, and cool drinks, whilst relieving this symptom, will also aid in reducing temperature. A large quantity of boiled water may be placed in the ice-chest in the morning, and will serve for the day's use. We may give this water rather frequently, and in small amounts. Barley water, treated and administered in the same way, is very acceptable to small children, and possesses the added advantages of slight food and medicinal value. In all cases, whether severe or otherwise, whether extremely acute or long-continued, the bowels must be emptied of the poisonous, offending material. The early dose of castor oil will frequently avert further trouble, but in the majority of fairly mild cases calomel in broken doses will stand us in better stead. This is especially true in cases where vomiting is marked. Then calomel, by its action upon certain secretions, exerts an antiseptic influence. After the intestinal tract has been thus cleansed of the offending material, the intestinal antiseptics, combined with bismuth, usually yield us good results.

Salol..... 1 grain.

Bismuth subnitrate..... 8 grains.

Take one powder every three hours.

Or:

Salol..... 1 to 2 grains.

Bismuth subgallate..... 5 to 8 grains.

Take as above.

In extremely acute cases (cholera infantum) we can scarcely wait for these measures to act. Enteroclysis with lavage then yields us our best results. The armamentarium for carrying out this procedure need be a very simple one. A glass funnel, a piece of rubber tubing two feet long, a pair of soft rubber catheters (one for the stomach and one for the bowel) furnish us a full equipment. With reference to the fluid used we believe that the amount is of more importance than the quality. In cases seen early and with high temperature, ice-water acts most beautifully.

One must not try to pass the rectal tube more than three or four inches, else it will turn upon itself. Jacobi lays stress upon this fact, and it has been our experience.

In cases which are in a state of collapse when seen, the use of a hot solution would seem more rational than that of a cold solution. We use the hot normal saline solution.

Such irrigations may be repeated at intervals of from one to four hours, according to indications. Combined with irrigation, the intestinal antiseptics will again stand us in good stead.

In subacute cases (entero-colitis), seen possibly after ten days or two weeks of illness, and when the poor little sufferer is worn to skin and bone, we are apparently between the horns of a dilemma. It is dangerous to check the bowels in such cases, for it has been well shown by Ashby and others that the strain of elimination may come upon the kidneys and that fatal nephritis may result. At any rate we are shutting up poisons in the economy, from which dangerous ptomains may emanate. On the other hand, the child is becoming exhausted, and we fear to resort to the use of a laxative or purgative preparation. Here again enteroclysis solves the riddle, for not only is the poison diminished in this way, but the use of warm irrigation is in itself stimulating. Alcohol is especially useful where the common complication of catarrhal pneumonia is present. Digitalis is also important in the latter instance.

TEETH AND SUPERSTITIONS.

The parish monthly nurse of Churcham, Gloucestershire, used invariably, after public baptism, to wash out the mouth of the infant with some of the remaining sanctified water as a safeguard against toothache.

In Ayrshire, the root of the yellow iris, chopped up and chewed, is believed to be a panacea; whilst some recommend the carrying of a double hazel nut about the person.

In many districts, on the first symptoms of a child cutting its teeth, a "teething bannock," or cake, was made, consisting of oatmeal, butter and cream, sometimes with the addition of a ring. This was baked in the presence of a few neighbors, and without a word being spoken by the cook. When prepared, it was given to the child to play with 'till broken, after which a small piece was put into the child's mouth, and each one present carried away a small portion. It was supposed to ease the troubles of teething.

In county Wicklow it was customary to point three smoothing irons, each three times, at the painful spot, in the name of the Trinity, when, sure enough, the pain would vanish.

Aubrey says, "The Irish do use a wolf's fang tooth, set in silver, which they hold to be better than coral for assisting teething; while in Germany silver bells are used." From Pitsligo we have the following:

"If ye cut yir first teeth abeen
Ye winna dance i' yir marriage sheen."

From Germany we have the following:

When children shaled their teeth, the women used to wrap salt about them and cast them into a good fire. Cramer saith that in parts of Germany some women will bid their children to take the tooth which is fallen or taken out, and go into a dark corner of the house, and cast the same into it saying: "Mouse, here I give thee a tooth of bone, but give thou me an iron one." Another custom was, as soon as a child's first tooth was seen, to box his ear, and the remainder were supposed to be more easily cut. The same was supposed to happen if a child were given an egg the first time it came into the house; though some said it made them more talkative. Children were warned not to lick the sockets of their first teeth, as the new one would grow twisted.

In Denmark, the elder tree was said to be good against toothache or fever. In order that a child's second teeth might come straight, it was customary in Roumania to bury the first teeth, as they fell out, at the foot of a straight oak tree. As a cure for toothache, in Roumania, the patient was made to sit beside an ant hill, masticate a piece of black bread, and spit it out over the ant hill. As the ants ate the bread the pain would cease.

Puritan New England was not exempt from superstitions. The first tooth cast by a child should be swallowed by the mother, to ensure a new growth of teeth.

Nurses recommended children to hunt for and carry double hazel nuts as preventatives. There is one story of a nurse who remonstrated strongly against throwing away the cast teeth of the children, as, if found and gnawed by an animal, the new teeth would be like those of the animal. This she illustrated by the case of old Master Simmons, who had a large pig's tooth in his upper jaw, because his mother threw one of his into the hog trough by accident.

A necklace made of beads turned from the root of the peony was worn by children to aid dentition and prevent convulsions.

Amongst the Malagasy it was customary, when a child lost one of its first teeth from the lower jaw, to throw it over the house; if from the upper, to bury it under the foundations; the belief being that a new tooth would grow in the socket if this was done. This at one time was also customary in England.—
JAMES C. DOUGLAS, *J. Brit. Dental As.*, 1896, xvii, 422.

EDEMATOUS LARYNGITIS IN CHILDREN.

LOUIS BAR (*Allgem. Wien. Medicinalztg*, 1896, xli., 359) says that acute edematous laryngitis is not even mentioned in most works on diseases of children, and a few lines only are devoted to this disease in some special works on laryngology. Prior to the year 1893, very little importance was ascribed to acute edema of the larynx, when Touchard's thesis, entitled "Laryngite aigue de l'enfance simulant le croup," appeared, which paper leaves only to be regretted that no laryngoscopic examinations were made. From the description given by the author, it seems probable that the cases he observed were cases of laryngitis edematosa inflammatoria, wherever the seat of

the edema may have been. We personally have observed two cases, both of which were examined by the laryngoscope, and we are therefore assured of the existence of this disease. A third case, running a somewhat different course, will be used as an illustration of the following studies.

Symptomatology and Description.—Frequently we meet in practice cases which present all the functional symptoms of croup, but recover so rapidly that it is impossible to maintain positively that they were cases of diphtheria. A laryngoscopic examination in these cases would enable us to demonstrate the edema.

He reports the following cases: 1. A child, five years of age, presented alarming symptoms of dyspnea. She had complained of pain in the throat for three or four days, had difficulty in swallowing, and swelling of the tonsils, and intermittent hoarseness. The dyspnea had been increasing steadily, and was accompanied by laryngotracheal whistling and hissing. The face was pale and cyanotic and the pulse was rapid, small and thready. There was no history of nose bleed, no expectation of pseudo-membranes, and no infiltration of the sub-maxillary glands. A laryngoscopic examination showed the mucous membrane to be slightly swollen, of uniform redness, without any pseudo-membranous deposit. The swelling of the interior of the larynx nearly closed its lumen, and during inspiration the slightly reddened inner borders of the vocal cords could be seen. Under a moist compress to the neck, a mustard foot-bath and aconite and belladonna internally, the child made a perfect recovery in three days.

2. A small child, $3\frac{1}{2}$ years of age, was brought to the author for examination, as the mother feared it might be suffering from croup. The voice was hoarse, only occasionally clear, the respiration somewhat impeded, and a slight cough was present. The mucous membrane of the larynx was much swollen, but allowed the slightly reddened vocal cords to be seen. Ipecac was given in emetic doses; a warm, moist compress was applied to the neck every two hours, and a mustard footbath was given. The child recovered in four days. In both of the foregoing cases a laryngoscopic examination revealed an edema of the glottis, which explained the dyspnea, the changeable voice and the rough cough. There certainly was no pseudo-membrane present. He reports a third case

which is very interesting. 3. A young girl, 11 years old, had malaria and whooping cough, which had been contracted two years ago but had left her in a condition of weakness manifesting itself in a gradual loss of weight. In 1895 she had two attacks of laryngismus stridulus. In 1896 the emaciation became more marked, and dyspnea made its appearance. Finally a cough, without expectoration, profuse sweating and suffocative attacks appeared. Fever, and later pain in the thyroid and cricoid region was complained of, and the aphonia became complete. The laryngoscope revealed edematous swelling and reddening of the ary-epiglottic region, a continuance of the edema to the false vocal cords, and also to the opposite side. The vocal cords, themselves barely visible between the swollen masses, were normal. An insufflation of tannin was made into the larynx, and a moist pack applied to the throat every two hours. Ice, milk, and cinchona were also given. For two days the improvement was marked, and continued to the 10th of March. The voice had again become clear and the respiration easy, but on the evening of March 13th the temperature rose to 39 deg. C., the cough became more frequent, and breathing much obstructed. On March 18th the patient died of asphyxia.

Autopsy.—The glottis was injected and slightly swollen, and there was no trace of pseudo-membrane. The false vocal cords were more voluminous than normal, wrinkled and doughy. Below the left vocal cord there was a fistula leading to a space behind the necrotic surface of the cricoid cartilage. No ulceration was present in this infiltrated pocket, but there was some pus. Below the true vocal cords the edema was more marked, partly due to the extension of the pus pocket. Microscopic examination revealed micro and streptococci and Koch's bacilli in large numbers. Hence it was a case of pseudo-edema of the larynx of tubercular origin. The dyspnea in edema of the glottis in children is usually severe and rapidly fatal, and in a few cases only is it gradual and slow. The form of dyspnea is *inspiratory*, due to the site of the edema in the ary-epiglottic folds and in the epiglottis itself. Very infrequently this edema of the glottis obstructs both phases of respiration. The voice is variable, rough or normal, whispering or high pitched, according to the greater or less involvement of the vocal cords. By a digital examination we are

often enabled to feel the thickened epiglottis and ary-epiglottic folds, but it is a dangerous procedure, and the diagnosis ought to be made with the laryngoscope.

Treatment.—The edema caused by catching cold, as well as that produced by the extension of an inflammation, should be treated antiphlogistically. The moist compress to the throat, swallowing ice pellets, spraying a solution of tannic acid into the larynx, and hot mustard foot baths, or occasionally an emetic, give the best and most rapid results. Application of cold is of the greatest benefit in the beginning of the disease, later on hot vapors and hot compresses are indicated. To allay nervousness and fear, ether, bromide of soda or chloral may be given. The spraying of the throat with a solution of tannic acid, 8 grammes to 500 of water will give good results. A solution of alum is not to be recommended. In the serous forms the insufflations are of great utility; in the inflammatory, pilocarpine injections seem more appropriate. Scarification, recommended by Gordon Buck of New York, has never been of use in the author's cases. More successful has been tracheotomy, which is sometimes indicated. It should be performed whenever symptoms of a progressive dyspnea are present.

A CASE OF POISONING WITH BROMOFORM.

VAN BOEMMEL (*Deutsche Med. Wochenschr*, 1896, *xxii*, 46). A child, ten years of age, suffering from whooping cough, was given 3-4 drops of bromoform twice daily. The result was exceedingly good, and the child recovered rapidly. About five months later the child swallowed about one-half of the remaining medicine. In fifteen minutes the child was seen by the writer. Face was slightly cyanotic, pupils greatly contracted, paralysis of heart and lungs threatening. Artificial respiration was at once instituted, with hot baths and cold applications to the head. Reaction was very slight, only the pupils would occasionally expand and contract again, under the applied stimulation. After two hours of continued work, ether injections were given subcutaneously with only little effect; trismus and severe convulsions of the extremities now made their appearance. After repeated ether injections, respiration was reduced from 42 and 47 to 27, and the pulse rose from 32 and

45 to 52 in the minute. This, after four hours of continual effort at resuscitation. Gradually the cyanosis of the lips disappeared, breathing became quieter and the child began to rally. Next day patient was perfectly well. Author thinks that patient must have swallowed 50-60 drops of bromoform; tongue was colored brown by it and the breath exhaled its odor.

Short Notes on Practice.—VON LICHERER (*Der Kinderarzt*, 1896, viii, 15), in the treatment of blennorrhea neonatorum, prefers a solution of oxycyanide of mercury (1:500) to sublimate and nitrate of silver. Having equal bactericidal qualities and antiseptic powers, it has the advantage over corrosive sublimate of not coagulating albumen to such an extent, and being much less irritating. Evert the eyelid and thoroughly wash out the conjunctival sac at least once daily. At home, continued ice applications are to be made. Where the cornea is not yet affected, the results are always satisfactory.

MASSINI, in the treatment of pneumonia in children, gives as many decigrams of digitalis as the child is old in years. According to the *Zeitschr. f. Krankenpfl.* powdered mustard is an excellent and mighty deodorizer. Particularly is it valuable in freeing the hands from clinging odors. It should be used wherever a rapid and thorough disinfection of the hands is required.



PEDIATRICS

Published SEMI-MONTHLY with Illustrations.

8s. a year.

All Communications should be addressed to PEDIATRICS, 45, St. Martin's Lane, London, or 1432, Broadway, New York.

Manuscripts received only on condition that they are contributed *exclusively* to this journal. Rejected manuscript will be returned.

Compensation to Contributors.—Illustrations will be provided without cost to the author, and 300 reprints or 100 copies of PEDIATRICS containing the article will be furnished. Extra reprints will be supplied *at cost* if the order accompanies the manuscript.

Subscription price, 8s. a year. Subscriptions may begin at any date. Subscribers failing to receive PEDIATRICS will confer a favour by sending a postal card to the London office, and the omission will be supplied.

How to Remit.—The safest mode is by Bank Check, Draft, Postal Order or Money Order, payable to the order of PEDIATRICS. Cash must be sent in Registered Letter.

Receipts.—The receipt of all money is immediately acknowledged.

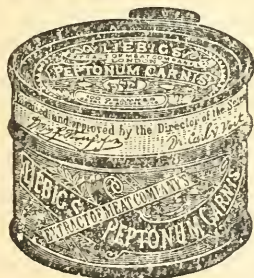
Copyright.—The entire contents of PEDIATRICS are covered by general copyright in the United States and Great Britain, but editors are welcome to use any article, provided credit is given.

Contracts.—No contract involving the expenditure of money or any departure from the approved regulations adopted for the business of PEDIATRICS is valid unless signed by the owner.

Views of Contributors.—The Editors and Publishers are not responsible for the views of contributors.

A PERFECT FOOD.

Liebig Company's



PEPTONE OF BEEF

LANCET says: "A powerful food."

BRITISH MEDICAL JOURNAL says: "A True Peptone of Meat."

MEDICAL PRESS says: "That the Liebig Company's Peptone of Beef is a Concentrated Food in the truest sense."

HOSPITAL says: "It is a Real Food."

PHARMACEUTICAL JOURNAL says: "Has never been approached by any similar preparation."

EDINBURGH MEDICAL JOURNAL says: "Very nutritious."

Samples free to Medical Men on application to LIEBIG'S EXTRACT OF MEAT COMPANY, LIMITED, 9 Fenchurch Avenue, E.C.

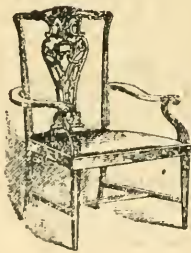
FRAY BENTOS OX TONGUES ARE THE BEST.

Complete Sets of Sheraton and Chippendale Chairs .

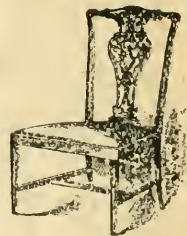
Special attention is directed to a Set of Chippendale
Chairs, consisting of

6 ORDINARY and 2 ELBOW CHAIRS

covered in Red Morocco (sealing wax color), price £27 10
the Set.



Examples of the above.



DRUCE & COMPANY,

BAKER STREET,



LONDON, W.